

WHAT IS CLAIMED IS:

1. A process for producing a fluorinated and silylated derivative exhibiting a bond between a carbon  
5 carrying at least one fluorine and a silicon, characterized in that it comprises a stage where a derivative of formula (I)  $R_f-Y-O-D$  is brought into contact with a base, in said formula (I):

- $R_f$  represents a hydrocarbon group having from 1  
10 to 15 carbon atoms comprising at least one fluorine atom on the carbon in the  $\alpha$  position with respect to Y,
- D is chosen from silylated radicals,
- and where Y is chosen from carbonyl and  
15 aminoalkylene groups.

2. The process as claimed in claim 1, characterized in that Y is an aminoalkylene of formula:



where the two R groups, which are identical or different, are such that  $HNR_2$  is an optionally cyclic secondary amine advantageously of at most 10 carbon  
25 atoms and where  $R'$  is hydrogen or else an aliphatic radical (that is to say, the open bond of which is carried by an optionally functionalized  $sp^3$  carbon) or aromatic radical (open bond carried by an intracyclic carbon of an aromatic ring) advantageously of at most  
30 10 carbon atoms, preferably of at most 6.

3. The process as claimed in claim 1, characterized in that Y is carbonyl.

35 4. The process as claimed in one of claims 1 to 3, characterized in that D corresponds to the formula  $Si(R_1)(R_2)(R_3)$  (III) with  $R_1$ ,  $R_2$  and  $R_3$ , which are identical or different, being chosen from aryls,

alkyls, alkyloxyls or halogens, preferably chlorine or fluorine.

5. The process as claimed in one of claims 1 to 3,  
5 characterized in that D corresponds to the formula  $\text{Si}(\text{R}_1)(\text{R}_2)(\text{R}_3)$  (III) with  $\text{R}_1$  and  $\text{R}_2$ , which are identical or different, being chosen from aryls or alkyls and  $\text{R}_3$  being chosen from aryls, alkyls and also from alkyloxyl radicals.

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6. The process as claimed in one of claims 1 to 5, characterized in that  $\text{R}_f$  represents the hydrocarbon group having from 1 to 10 carbon atoms and more preferably from 1 to 4 carbon atoms.

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7. The process as claimed in claim 6, characterized in that  $\text{R}_f$  is chosen from trifluoromethyl, pentafluoroethyl, heptafluoropropyls and nonafluorobutyls.

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8. The process as claimed in claim 7, characterized in that  $\text{R}_f$  is trifluoromethyl.

9. The process as claimed in one of claims 1 to 8,  
25 characterized in that the base is a weak base and such that the  $\text{pK}_a$  of the associated acid is at most equal to 7, advantageously to 5, preferably to 3, more preferably to 1.

30 10. The process as claimed in one of claims 1 to 9, characterized in that the base is a weakly silicophilic basic anion.

35 11. The process as claimed in one of claims 1 to 10, characterized in that said base is such that, when 1 mole of trimethylsilyl trifluoroacetate is brought into contact with  $1/10^{\text{th}}$  of an equivalent of basic anions in anhydrous DMF, a silylated ratio (basic anion initially present - free trifluoroacetate)/(free

trifluoroacetate) at least equal to  $1/50^{\text{th}}$ , advantageously to  $1/10^{\text{th}}$ , preferably to  $1/5^{\text{th}}$ , preferably to  $\frac{1}{2}$ , is obtained at thermodynamic equilibrium.

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12. The process as claimed in one of claims 9 to 11, characterized in that the molar ratio of the base, expressed in equivalents, (numerator) to the derivative of formula (I) is at least equal to 0.005, 10 advantageously to 0.01, preferably to 0.02.

13. The process as claimed in one of claims 9 to 12, characterized in that the molar ratio of the base, expressed in equivalents, (numerator) to the derivative 15 of formula (I), expressed in moles, is at most equal to 2, advantageously to 0.5, preferably to 0.2.

14. The process as claimed in one of claims 1 to 13, characterized in that the reaction is carried out in a 20 medium chosen from aprotic solvents, ionic solvents and molten salts, as well as their mixture.

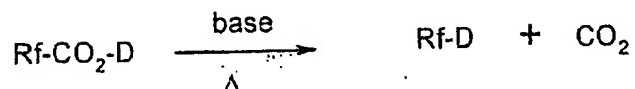
15. The process as claimed in claim 14, characterized in that said medium comprises a concentration of 25 acid(s) with a pKa of less than 20, advantageously than 25, preferably than 30, of at most equal to 1000 ppm in moles with respect to the moles of solvent(s).

16. The process as claimed in one of claims 1 to 15, 30 characterized in that the reaction is carried out in a polar aprotic solvent, the donor number DN of which is at least equal to 10, advantageously to 20.

17. The process as claimed in one of claims 1 to 16, 35 characterized in that the reaction is carried out in a polar aprotic solvent, the dielectric constant  $\epsilon$  of which is at least equal to 10, advantageously to 15.

18. The process as claimed in one of claims 3 to 17, characterized in that the reaction is carried out at a temperature such that the reaction, symbolized by the equation below, takes place

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19. The process as claimed in one of claims 1 to 18, characterized in that the pressure is chosen so as to be at least equal to atmospheric pressure.

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20. A reagent which comprises, for successive or simultaneous addition:

- a weak base which is weakly silicophilic,
- a compound of formula (I) with Y being a carbonyl;
- 15 - a solvent, the boiling point of which is at least equal to 100°C, advantageously greater than 120°C, advantageously between 130°C and 170°C, more preferably from 130°C to 150°C.